

Message

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Sent: 2/28/2019 2:23:31 PM
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Subject: FYI Only: Water articles in the Press



Statement: EPA faces Dirty Water Rule backlash at public hearing

WASHINGTON — In Kansas City, Kansas, the U.S. Environmental Protection Agency (EPA) will hold the first and only public hearing today for the Dirty Water Rule—the proposed replacement to the 2015 Clean Water Rule. Bart Johnsen-Harris, clean water advocate for Environment America, issued the following statement:

“This ‘Dirty Water Rule’ is an unprecedented assault on clean water, and Americans won’t stand for it. As EPA works to open our waters to polluters, today’s public backlash is well-deserved.

“The EPA’s proposed new rule has galvanized wide-ranging opposition, including from small business owners, sportsmen, and public health stakeholders who know the importance of clean water. Dr. Tim Fete came to the hearing in Kansas City from Columbia, Missouri to highlight the health problems he sees firsthand as a pediatrician. Vinny Valentino of Land Grant Brewing in Columbus, Ohio, made the trip to talk about the importance of clean water to his business, family, and community.

“The opposition we’re seeing in Kansas City speaks to a much broader movement. People don’t want our waters opened to polluters. As public comments roll in, the EPA should take the hint and stop this ridiculous rollback of clean water safeguards.

“Preserving federal protection for all our waterways is strongly supported by sound science and the American people. The Clean Water Rule had the backing of more than 1,000 scientific studies and comments from more than one million Americans.

“As stewards of our environment, it is our moral obligation to protect our country’s waters. For the sake of our drinking water, our ecosystems, and our way of life, we must stop the EPA from opening our waters to polluters.”

Corps Eases Wetlands Mitigation Credit System, Raising Enforcement Fears

February 27, 2019

The Trump administration has finalized guidance that will allow wetlands mitigation banks to receive the majority of their compensatory mitigation credits without proving that projects meet ecological performance standards detailed in a

rule issued by EPA and the Army Corps of Engineers, a change that one expert says upends the rule's enforcement mechanisms.

The new guidance, “Mitigation Bank Credit Release Schedules and Equivalency in Mitigation Bank and In-Lieu Fee Program Service Areas,” quietly released on the Corps' website late last week, is one of several actions the administration is taking to increase the amount of wetlands mitigation credits available in an effort to speed Clean Water Act (CWA) dredge-and-fill permitting.

But while the new approach will likely create permitting efficiencies, the wetlands mitigation expert says it removes an important compliance tool and makes it harder to get an early warning sign that a project is not performing as well as expected.

The source warns that the guidance could undercut successes being achieved as a result of the wetland mitigation program created by the joint EPA-Corps compensatory mitigation rule, which has been held up as a model for other environmental markets and mitigation programs, including water quality trading.

Compensatory wetlands mitigation is a requirement in CWA section 404 dredge-and-fill permits if the applicant plans on destroying a wetland or stream. Mitigation projects replace lost wetlands with new wetlands constructed in the same watershed either through a third-party broker, known as an in-lieu fee program, or by a mitigation bank, which often already has a compensatory project under way.

EPA and the Corps' 2008 rule outlines a three-phased credit release schedule for mitigation banks that in practice has resulted in roughly a quarter of the credit being released once the site is protected, financial assurances are in place, and the bank instrument has been approved. Approximately half of the credits are released as “appropriate milestones are achieved,” and the final portion of credits are released “only after full achievement of ecological performance standards,” which are milestones listed in the rule.

This tiered release approach is a major rationale for the rule's preference for credits from mitigation banks rather than in-lieu fee programs because of the link between the credits and ecological performance standards, which the rule says must be based on the best available science that can be measured or assessed in a practical manner.

But the rule “does not specify or limit the number of interim credit releases to occur between the initial credit release and the final credit release,” the new guidance says. Therefore, the new guidance explains how “the interim credit release can also be conducted as a single release of credits as long as sufficient financial assurances are in place to provide a high degree of confidence that the ecological performance standards will be achieved.”

The guidance says the new credit release schedule “will make more mitigation banks credits available for sale or transfer to permittees after the mitigation bank is constructed and begins to provide aquatic resource function.” This availability, however, “is contingent on the mitigation bank sponsor successfully constructing the mitigation bank in accordance with the approved mitigation plan and providing sufficient financial assurances for achievement of the ecological performance standards specified in the approved mitigation plan,” the guidance says.

85 Percent Of Credits

In practice, this could result in 85 percent of the credit being released once the project is constructed but before it has demonstrated it is working as intended, the mitigation expert says.

The guidance says this infusion of credits available for sale to permittees shortly after successful construction of the project may reduce reliance on permittee-responsible mitigation, “which in many cases has greater risk and uncertainty compared to mitigation bank credits.”

But the wetlands mitigation expert questions whether this change will actually result in improved ecological functions, noting that prior to the rule, “there was a lot of mitigation failure.”

“I think you'll see [mitigation] banks walking away from projects” once they receive the majority of their credits because the incentive to ensure the projects are working well will have been diminished, the source says.

And while the guidance ties the earlier release of credits to financial assurance mechanisms, the source says this does not provide the same level of oversight as requiring proof that ecological performance standards have been achieved.

The change is a “disappointment for all mitigation,” the source says, especially given the 2008 rule's success.

For example, a [recent report](#) from the National Network on Water Quality Trading aimed at reducing barriers to developing such programs points to the rule's clarification of regulatory liability as part of what has led to wetland and stream compensatory mitigation becoming the largest and best-established ecosystem market in the United States. The market transacted an estimated \$3.5 billion in credits in 2016, the report says.

And two EPA officials noted in a [recent article](#) in the January 2019 issue of *Environmental Law Reporter* that a surge in wetlands mitigation banking that has occurred since the rule was promulgated. The officials are Palmer Hough, an EPA environmental scientist who was EPA's lead author on the rule, and Rachel Harrington, an aquatic ecologist in EPA's Office of Wetlands, Oceans and Watersheds.

The rule put in place a suite of changes to how CWA section 404 compensatory mitigation is done, with the goal of improving ecological outcomes of compensatory mitigation projects and increasing transparency, predictability, and consistency in compensatory mitigation decisionmaking, the article says.

In the 10 years prior to the rule, average annual credit withdrawal transactions were 1,694 per year while in the 10 years since the rule the average annual credit withdrawals were 2,635 per year, the article says. And the change for the subset of banks with stream credits went from 110 per year prior to the rule to an average of 371 per year after the rule.

The article concludes that 10 years after the rule's promulgation “significant progress has been made in the nation’s approach to compensatory mitigation, but work remains to ensure an efficient process for wetland, stream, and other aquatic resource compensatory mitigation decisionmaking and to ensure that compensatory mitigation is providing effective ecological outcomes on the ground.” -- *Lara Beaven* (lbeaven@iwpnews.com)

Utilities Urge EPA Continue Voluntary Focus In Upcoming Water Reuse Plan

February 27, 2019

A group representing public water utilities is urging EPA to ensure its upcoming Water Reuse Action Plan continue to allow utilities to implement water reuse options on a voluntary rather than mandatory basis, providing an early glimpse of issues that may be debated when EPA unveils the plan later this year.

“There is a concern that federal guidance documents can be inappropriately used to influence permit writers or can be incorporated into federal or state regulatory frameworks,” the National Association of Clean Water Agencies (NACWA), which represents wastewater and stormwater utilities, says in a [Feb. 22 letter to EPA](#).

“NACWA strongly advocates that guidance documents, including EPA’s Action Plan on Water Reuse, when finalized, remains voluntary in nature and is used for assistance only,” the group adds.

NACWA sent its letter days before EPA announced Feb. 27 that it was developing the plan, which the agency said in a statement is “part of a larger effort by the Trump Administration to better coordinate and focus resources and activities on some of the nation’s most challenging water resource concerns, including ensuring water availability and mitigating the risks posed by droughts, saltwater intrusion of fresh groundwater, groundwater scarcity, climate change, and several other site-specific stressors.”

The agency says a draft of the plan will be released for public comment in September at the Annual WaterReuse Symposium in San Diego.

“The Nation’s water resources are the lifeblood of our communities, and the federal government has the responsibility to ensure all Americans have access to reliable sources of clean and safe water,” EPA Assistant Administrator for Water David Ross said in the statement. “There is innovative work happening across the water sector to advance water reuse, and the EPA will provide the leadership needed to bring these ideas together.”

But ahead of seeking broad public comment on the plan, EPA reached out to NACWA for comments on an early draft version of the plan.

In its comment letter, NACWA says water reuse and recycling initiatives should continue to be part of state regulatory frameworks without federal intervention, but at the same time recommends EPA work closely with other federal agencies, including the Interior Department's Bureau of Reclamation, when drafting and implementing the plan.

The Bureau plays an important role in water reuse and recycling initiatives, and municipal clean water utilities in the western United States have worked with the Bureau for a long time, NACWA says.

EPA says in the statement that ongoing efforts by other federal agencies, including the Interior and Energy departments, and various non-governmental organizations dedicated to water resources management will be coordinated and leveraged as part of the overarching strategy to advance water reuse.

Additionally, NACWA tells EPA that when drafting and implementing its action plan, “it is important to be careful when using direct and indirect potable reuse terminology because each are used in a specific manner in the reuse field.”

NACWA's Arid State and Water Reuse Workgroup “recommends the definitions be clear and concise, so that they are not misconstrued in practice or in regulatory policy,” the letter says.

The plan's vision should include wastewater and stormwater to accurately characterize the truly integrated “one-water” approach and should include water affordability. “Affordability is not mentioned once throughout EPA’s Action Plan. Acting Administrator Wheeler’s quote should be revised to read ‘. . . providing *affordable* access to clean, safe, and secure water,’” NACWA says.

Early Draft

The group also suggests broadening the water reuse vision to include the benefits of indirect potable water reuse. “The focus of direct water reuse makes sense to meet multiple water needs. But reuse is much broader than direct reuse,” the comments say, asking whether the plan should include a discussion on indirect water reuse that is discharged into a Water of the United States or Water of the State and is available for aquatic use before diverted for additional use.

Based on NACWA's comments, it appears an early draft of the plan includes a framework that discusses technical improvements, regulatory aspects at all levels of government, financial incentives, fit-for-purpose, and outreach opportunities.

NACWA suggests EPA add two additional subsections to the regulatory aspects section of the plan. In addition to discussing public health protection; regulatory and policy incentives, barriers and facilitation; and workforce and operator training certification programs, the regulatory aspects section should also include subsections on source control and regulatory prohibitions, the group says, while also making recommendations about the subsections EPA is already considering.

In the area of public health protection, NACWA says establishing industry standards and not regulations would facilitate other entities developing potable reuse frameworks. “Many of the Constituents of Emerging Concern do not have health guidance to provide a basis for regulations and/or permitting. Some national guidance would be helpful,” NACWA says.

In the area of regulatory barriers, NACWA says there needs to be a unified regulatory/permitting framework so that there are not conflicting or duplicative requirements resulting from potential reuse entities having to deal with two or more different regulatory frameworks.

And NACWA says that in the area of workforce training, there is not presently consensus among reuse entities on the best approach to training and certifying operators, particularly of potable reuse facilities.

The potential new subsection for source control “could promote the consideration of reuse or recycled water by other federal programs that have authority over chemical usage and could also recognize that initial source control efforts can be far less costly than treatment,” NACWA says.

A subsection on regulatory prohibitions could support the development of produced water treatment technologies by eliminating the regulatory prohibitions on discharge and indirect discharge, in some cases, of produced water, NACWA says.

“The prohibitions in place currently ignore the fact that produced water can be treated to a quality such that its continued presence in the hydrological cycle is beneficial to the environment, including to wildlife and agriculture. Deep well injection of produced water is not available or appropriate in some areas nor will it always be an option,” the letter says.

NACWA says the financial incentives aspect of the draft action plan is unclear though the group it is pleased to see EPA focused on fit-for-purpose applications of water reuse. “As this draft moves forward it is critical that EPA and state regulators continue to consider Fit-for-Purpose and the importance of reuse and recycled water ‘As a Drinking Water Source’ among other categories and applications,” NACWA says.

The group also says more messaging on a national level of the benefits and successes of water reuse in tandem with discussion of the public health and environmental protection safeguards and benefits is necessary. -- *Lara Beaven* (lbeaven@iwpnews.com)

Escalating Controversy, McCollum Seeks EPA Region 5 Permit Comments

February 27, 2019

Rep. Betty McCollum (D-MN), chair of the appropriations subcommittee that oversees EPA’s budget, is urging the agency to release Region 5 staffers’ comments criticizing a Minnesota mine permit that political leaders allegedly suppressed, escalating a controversy that has already prompted calls for an Inspector General (IG) review.

“In the interests of transparency and maintaining the public’s trust, I am requesting that you make available to the public a copy of any written comments or concerns prepared by EPA staff regarding the Northmet mine permits,” writes McCollum in a Feb. 25 letter to Acting EPA Administrator Andrew Wheeler, referring to the permit that Minnesota drafted under delegated Clean Water Act (CWA) authority and that Region 5 reviewed.

EPA has begun to test its new approach for federal reviews of state-crafted permits, and critics of Region 5 -- which includes Minnesota -- suggest its political officials suppressed staff comments faulting the mine permit.

A former EPA lawyer and a local tribe have raised concerns that political officials suppressed Region 5 staff’s written comments and urged the IG to investigate. Separately, a union representing many public employees has also filed a Freedom of Information Act (FOIA) lawsuit seeking the alleged staff comments.

McCollum adds to the criticism by saying failure to publicly release the comments EPA staff prepared on the Minnesota Pollution Control Agency’s (MPCA) CWA National Permit Discharge Elimination System (NPDES) permit for a PolyMet Copper-Nickel mine near Lake Superior runs counter to Wheeler’s directive from late 2018 to boost transparency issued in the wake of his predecessor Scott Pruitt’s departure.

"[L]ast November you sent a memo to EPA staff reaffirming your commitment to agency transparency and reminding staff of their long-standing obligations under the Federal Records Act to create written documentation for 'all substantive decisions reached orally,'" McCollum says.

McCollum's letter hints at others' allegations that Region 5 staff read criticism of a draft water permit for the mine to state officials over the phone rather than providing written comment the public might more easily access.

McCollum's request for documents from the Region 5 review of the MPCA permit build on growing criticism that suggests the mine's permit is becoming a test case for the Trump administration's agency-wide effort to streamline regional reviews of state permitting and other programs implementing federally delegated environmental law.

The alleged failure to provide written comments on a NPDES permit for the mine comes as EPA has recently piloted its new framework for reviewing state permits in several regions and on reviews of the Title V air permitting program and on real-time review of state-issued NPDES permits.

In a meeting last March with EPA Chief of Operations Henry Darwin, chief author of the plan for streamlining federal reviews of state programs, state regulators requested that EPA focus any new process on regions' reviews of states' NPDES permits and targeted Region 5 as an example of why a streamlined policy is needed.

During the March 22 closed-door session of the Environmental Council of the States (ECOS) 2018 Spring Meeting in St. Paul, MN, some state regulators cited Region 5 as a region that conducts in-depth reviews of permitting and other decisions rather than merely assessing whether a state's permit is adequate to meet federal standards.

A former state regulator told *Inside EPA* soon after the meeting that "historically, Region 5 states say Region 5 is way down [in] the details of what they do every day."

Some state officials also noted that Region 5, which spans Minnesota, Wisconsin, Illinois, Indiana, Ohio, and Michigan, has more staff than some other regions, and suggested that scaling back the region's staff could help limit its scrutiny of state actions and ensure consistency with other regions.

'Last Option'

Wheeler memorialized Darwin's plans for streamlined reviews in an Oct. 30 memo to regional officials, "Principles and Best Practices for Oversight of Federal Environmental Programs Implemented by States and Tribes."

The memo generally calls for EPA to defer to state decision-making in most cases but also lays out situations when regulators should intervene to protect human health and the environment.

"States and tribes have the primary role in state- and tribal-implemented federal programs, and the EPA will generally defer to states and tribes in their day-to-day activities," Wheeler says describing the first of four principles that will guide regions' review of state programs.

"Withdrawal of program implementation authority is a last option to be considered after all other options have been exhausted or when human health and the environment are at risk," the memo adds.

But the status of the EPA regions' implementation of the policy for streamlined reviews is unclear.

In a [Feb. 6 interview](#) focused on Darwin's wide-ranging effort to bolster efficiency at EPA, through changes such as regional reorganization, creating more efficient processes through LEAN business techniques, and streamlining regional reviews of state programs, Darwin said he was not currently up on the status of the agency's piloting of the new framework for faster reviews.

He said that he is in discussions with regional officials who conduct the reviews on continuing to develop a framework for improving EPA's oversight of state programs. He said EPA is trying to develop a system for determining the number of permits regional staff would audit, and added that the depth of any audit would likely vary depending on the type of permit being reviewed and a state's history in effectively issuing those permits.

"We have been talking to the offices that do these reviews [about] how could we establish a system -- that is consistent -- but that we decide on a state-by-state basis -- which permits warrant review based on past experiences," he said.

'A Larger Pattern'

In her letter, McCollum reiterates concerns raised by a retired EPA water attorney, a Minnesota environmental group and the Fond du Lac Band of Lake Superior Chippewa that Region 5 staff had "serious reservations" that MPCA's January 2018 NPDES permit was inadequate and so prepared written comments but never forwarded the written comments to state regulators.

McCollum says that such a process would give the public little knowledge of EPA staff's concerns and whether the state adequately addressed those concerns prior to issuing the final NPDES permit in December 2018.

In a nod to claims in requests to the IG and the Public Employees for Environmental Responsibility [Feb. 19 FOIA lawsuit](#) claiming that Region 5 staff last April read comments to MPCA over the phone, McCollum says, "To the extent that the substance of written comments were ultimately shared with the MPCA verbally, I ask that the written comments be annotated to indicate which concerns were shared verbally."

EPA's IG is currently weighing requests from retired EPA attorney [Jeffrey Fowley](#) and the [Fond du Lac Band](#) to investigate the Region 5 review of MPCA's permit for the mine.

While McCollum targets Wheeler's [transparency pledges](#) that have earned him bipartisan praise as his nomination to remain at the helm of the agency is pending, the requests for an IG investigation suggest that allegations of an inadequate regional review of the PolyMet mine permit may reflect broader shortcomings in EPA's review of state programs.

The Fond du Lac Band in its Feb. 5 request for an IG investigation raises “serious concerns” that “irregularities” in Region 5’s review of the MPCA permit for the mine could hinder future reviews the region conducts.

The Band cites as an example EPA’s role in a pending PolyMet application to the U.S. Army Corps of Engineers for a Clean Water Act section 404 and dredge-and-fill permit for the mine.

“[F]ailure to provide (for the record) such comments appears to violate legal and certainly ethical requirements and, sadly, appears to be part of a larger pattern by Region V to suppress staff comments on other MPCA permitting actions as well,” the Band says. “If true, this confirms that EPA is not carrying out its basic responsibilities, including effective oversight of delegated state regulatory actions.”

And while Wheeler’s Oct. 30 memo on regions’ reviews allows for situations when EPA might intercede if state permitting is deemed inadequate, Fowley says in a [Feb. 1 supplement](#) to his initial request for an IG investigation that the Trump administration appears unlikely to take that step even when circumstances warrant it.

“I think your office also should investigate the failure of the current administration to support making formal objections and taking over permit issuance when necessary, to prevent state permits being issued which violate minimum federal requirements,” Fowley says in the addendum.

“My understanding is that no such formal objections and assumptions of federal responsibility have occurred during this administration in the water program in Region V or any other Region.” -- *Dave Reynolds* (dreynolds@iwpnews.com)

E&E

Where EPA foresees devastation, Army Corps doesn't

<https://www.eenews.net/greenwire/stories/1060122567/search?keyword=EPA>

Ariel Wittenberg

When it comes to the Pebble mine, the Army Corps of Engineers and EPA don't see eye to eye.

The Army Corps' new environmental review of the proposed project differs significantly from the 2014 EPA Bristol Bay watershed assessment that the agency used to pre-emptively "veto" a permit involving much of the mine footprint, at the headwaters of Bristol Bay.

One key difference: The Army Corps didn't look at the worst-case spill scenario, while EPA did. The two federal agencies also differed on the likely impacts of a spill, the prospects for cleanup, and how it would affect the area's salmon spawning and rearing grounds.

That's partly because EPA's assessment was based on documents Pebble LP filed with the Securities and Exchange Commission years ago, not the specifications the company included in its later permit application to the Army Corps. But the disparities also stem from differing approaches to environmental reviews.

Discrepancies between the two agencies' environmental reviews are sure to draw scrutiny in coming months from environmental groups, Native groups and fishing industry advocates who oppose the proposed mine.

Opponents of the mine worry that the 8,000-acre footprint of the project alone could bury important salmon streams for spawning and rearing. The risk of a major dam failure releasing tons of toxic waste and heavy metals that could be toxic to fish into the ecosystem is small. But Bristol Bay advocates say it is not a risk they are willing to take.

Worst-case scenario

The Army Corps' environmental review of the potential impacts of the Pebble mine didn't examine what many say would be the worst-case scenario: a full failure of a tailings storage facility, sending billions of cubic feet of mine waste into premier Alaskan salmon habitat.

The largest and most toxic tailings spill scenario considered in the draft environmental impact statement (DEIS) released by the Army Corps' Alaska District last week involved only the top 6 feet of tailings draining out before workers would be able to stanch the flow. That would result in 185 million cubic feet being swept into the South Fork Koktuli River, damaging salmon and their habitat, but with "no population-level impacts to wildlife species."

EPA's 2014 assessment painted a different picture, considering a total failure of tailings storage facilities of different sizes. The smallest spill the agency considered would result in 5.5 billion cubic feet of tailings being dumped into the North Fork Koktuli River, with "devastating effects on aquatic life and habitat."

"Although a tailings dam failure is a low-probability event, the probability is not zero," the agency wrote. "Should such an unlikely event occur, it is important to understand the potential impacts on the Bristol Bay Watershed."

In deciding which scenarios to include in its DEIS, the Army Corps convened a panel of experts to discuss the likelihood of different kinds of tailings spills and their impacts. While the discussion included "massive catastrophic failures or 'worst case' scenarios," the corps ultimately decided to discuss less-severe spills in its DEIS.

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It's not uncommon for the Army Corps to exclude a "worst-case analysis" in environmental impact statements for mines, said Center for Science in Public Participation co-founder David Chambers, who has an engineering degree from the Colorado School of Mines and has worked with opponents of the Pebble mine. Chambers argued that the practice can be misleading to the public, who should "at least be aware of what a worst-case scenario might look like, even though it's a low-probability event," he said.

One contributing factor to the differences between EPA's and the Army Corps' analyses is the fact that EPA completed its assessment before Pebble LP submitted its mine application — a process the company stalled on for years. EPA assumed that, as with many mines, Pebble's tailings would all be stored together in one pit. Basing its review on Pebble's permit application, the Army Corps knew the company planned to store the more toxic pyritic tailings separately from so-called bulk tailings.

The largest spill the corps considered was of a partial failure at the pyritic tailings storage facility.

EPA and the Army Corps also envisioned spills occurring on different forks — north and south, respectively — of the Koktuli River and their tributaries, though both scenarios would result in at least some tailings traveling all the way downstream to Bristol Bay.

Dilution as the solution

Dermot Ross-Brown, a professor at the Colorado School of Mines who specializes in tailings dam designs, said the size of a spill doesn't always correlate to the severity of its environmental impact. "If you add a 10-foot layer of sediment or a 20-foot layer of sediment to an area, it doesn't make a difference — you still can't use the land the way you used to," he said. "The key thing is how toxic the tailings are. Some tailings aren't necessarily toxic, and others are."

That's another area where the Army Corps and EPA analyses diverged.

Heavy metals like copper and cadmium included in mine tailings can become toxic and harm fish in one of two ways: The metals dissolve enough to be absorbed by fish, or the metals are oxidized and generate acid.

The agencies disagreed on whether metals in Pebble's tailings would dissolve enough for fish to absorb them.

Both agencies wrote that their spill scenarios would violate water quality standards for heavy metals in the North and South Forks of the Kootenai River, and waterways farther downstream. But exceeding safe levels for heavy metals in a river does not necessarily mean salmon would be harmed.

After reviewing a number of studies, the Army Corps concluded that the "sub-lethal impacts on fish," like decreases in growth or reproduction rates, are "unknown."

"However, chronic exposures to elevated metals above baseline are not predicted beyond several weeks. Therefore, long-term persistent population-level impacts to fish would not occur," the DEIS said. That, in turn, means the iconic Bristol Bay fishery would not see severe impacts from a tailings spill.

EPA's assessment saw similar uncertainty but came to the opposite conclusion. While recognizing that some evidence is "ambiguous," the agency concluded: "All lines of evidence are consistent with toxic effects of tailings."

The Army Corps DEIS said heavy metals are unlikely to affect fish, in part, because it would take decades for the metals to dissolve enough for fish to absorb them. In that time, the agency wrote, the metals would have been flushed farther downstream and diluted.

EPA, however, questioned whether heavy metals could be adequately diluted, which would require additional flows of clean sediment into waterways. The Bristol Bay watershed is largely undeveloped, meaning there aren't other projects sending clean sediment downstream that could dilute any Pebble tailings.

"Dilution with clean sediment would be slowed by denser vegetation and less land disturbance," EPA said.

EPA's and the Army Corps' approaches to acid generation from metals contained similar discrepancies.

The DEIS said spilled tailings are unlikely to generate acid because that would require the heavy metals to come in contact with oxygen and most tailings would be suspended in water. Any acid generated from tailings left on land, the DEIS says, would soon be washed away and diluted by rainstorms and flooding.

EPA found the risks to be more complicated. The Bristol Bay watershed assessment described how shallow, turbulent water found in the region "is typically near oxygen saturation," meaning sediment can be exposed to oxygen and heavy metals could oxidize and leach acid. High stream flows would both increase the possibility of acid generation and increase the probability that acid would be diluted, "resulting in complex dynamics," EPA concluded.

Stream impacts

The DEIS and watershed assessment also diverged on how salmon could be affected by tailings burying streams or increasing turbidity.

Both reviews said tailings spills would increase turbidity and suspended solids in waterways, and both cited case studies showing that increased turbidity can kill incubating eggs or juvenile salmon.

But the Army Corps DEIS took pains to show that salmon spawning habitat would not be affected.

The tributary directly abutting the tailings storage facility is salmon-rearing habitat and "does not provide suitable spawning habitat for several miles," the corps wrote. But, the agency acknowledged, "It is possible that large amounts of sediment may be washed far enough downstream to cause egg smothering at spawning locations and potentially alter spawning substrates."

On the next page, however, the DEIS said that while habitat next to the tailings spill might be destroyed, most spawning salmon have been observed in lower parts of the South Fork Kootenai River. "This suggests the presence of higher-quality habitat or simply adequate qualities of suitable habitat, readily available to accommodate the numbers of salmon entering the streams without the need to distribute further upstream," the DEIS said.

Still, the corps predicted that a partial tailings spill could increase suspended solids by more than 1,000 times local water quality standards, and that the increased turbidity would extend all the way downstream to Bristol Bay, lasting more than three weeks.

EPA, analyzing a much larger potential spill, said it could not assume that salmon would necessarily be able to find or access new habitat if theirs was destroyed. The agency also expressed concern that a large tailings spill would bury some parts of the stream, potentially cutting fish off from habitat that was not destroyed.

"Resident fish would require sufficient tributary habitat to complete their entire life history," EPA wrote.

Chemical Watch

US EPA scientists target 75 PFASs for further scrutiny

<https://chemicalwatch.com/74657/us-epa-scientists-target-75-pfass-for-further-scrutiny>

Thousands of per- and polyfluoroalkyl substances (PFASs) are in use worldwide, and public concern about their presence in drinking water has been mounting. Little toxicology information exists for the vast majority of these compounds, hindering efforts to determine safe exposure levels and assess potential risk.

A US EPA and National Toxicology Program (NTP) collaboration is seeking to rapidly plug this information gap by studying in depth a small representative sample of the PFAS chemical space.

"The hundreds of untested PFASs provide a scenario in which traditional one-by-one toxicity testing would consume tremendous resources and useful toxicity information would not be available for decades," a group of scientists led by the EPA's Grace Patlewicz say in a paper, published in *Environmental Health Perspectives* on 11 January.

Instead, high-throughput *in vitro* toxicity tests are being conducted on a screening library containing 75 PFASs that the team chose to represent the entire breadth of the substances in commercial use.

The generated data will be combined with measured and predicted human exposure information to determine potential risk. From this, a smaller group of PFASs will be prioritised for *in vivo* testing.

The selection of the representative PFASs was described in the recent paper. A combination of targeted database searches and expert working groups were first used to choose 271 PFASs of interest from the EPA's 760,000+ compound Distributed Structure-Searchable Database Network (DSSTox).

Next, the 271 compounds were manually sorted into one or more structural categories. Cheminformatics was then used to rank substances by criteria, such as number of other substances in same category and previously expressed interest by the EPA.

"An initial selection of 75 substances was made based on these scoring considerations," say the scientists. Some were later switched due to technical issues such as safety concerns and insolubility.

"The final PFAS 75 comprised 46 substances representing ten of the structural categories with some existing *in vivo* toxicity information and 29 substances covering a further 24 structural categories," the scientists say.



State EPA Considers Rules for Water-Quality Certification

COLUMBUS, Ohio — Draft rules being considered by the Ohio Environmental Protection Agency would allow developers' privately-hired consultants to get state certification to monitor and certify water quality, potentially speeding up the permit process.

Currently, state biologists monitor water quality and determine whether applicants should receive water permits for developments at sites that have wetlands or streams, The Columbus Dispatch reports. The state also validates monitoring done by consultants routinely hired by applicants.

The draft rules being considered by the state EPA would allow consultants hired by companies to receive state-level professional certification for monitoring water quality and perform some work now handled by state biologists.

Environmental groups said they have concerns that if the proposal goes through, the Ohio EPA could be abdicating too much of its responsibility over water-quality monitoring to certified professionals paid by companies. They also are concerned about the quality of data to be collected under the new Water Quality Certified Professional Program.

Elissa Yoder Mann, a conservation program manager for the Sierra Club Ohio Chapter, said the group would like to see Ohio EPA "focus more on qualified practitioners using credible data to make informed decisions."

"We are not convinced the Water Quality Certified Professional Program will do so," she said.

Tiffani Kavalec, chief of Ohio EPA's Division of Surface Water, said certified professionals hired by companies would receive state training, and agency staff could conduct random audits and discretionary audits if they believe something could be wrong with the certified professionals' work.

Without the program, state biologists spend part of their time going out to proposed project sites and checking the accuracy of work done by the non-certified consultants.

The voluntary program using certified professionals would reduce the potential wait time for developers to get Ohio EPA responses on permits from a maximum 180 days to a maximum of 90 days, according to officials.

Ohio EPA spokesman James Lee told The Associated Press that the use of certified professionals would enable agency staff to better evaluate applications that come in from non-certified consultants.

Lee said the rules as drafted require those seeking certification to have prior education in environmental sciences or equivalent professional experience.

The initial public comment phase on the rules ended Monday, Lee said, but the agency will seek additional comment and hold a hearing before any rules are proposed to the Legislature's Joint Committee on Agency Rule Review. That committee reviews proposed rules from more than 110 state agencies and can recommend invalidating rules if it determines they do not meet state requirements.

TheIntelligencer

Casey, Toomey call on feds for PFAS meeting

Pennsylvania Sens. Bob Casey and Pat Toomey, along with a trio of congressional representatives, are requesting officials from the Department of Defense and EPA travel to Pennsylvania to provide updates on chemical contamination.

Three regional U.S. representatives and both Pennsylvania senators are calling on federal officials to travel to the state and provide an update on widespread chemical contamination in Bucks and Montgomery counties, according to an [official letter](#) sent Thursday.

Sent from the office of U.S. Sen. Bob Casey, D-Scranton, the letter is the latest sign of growing frustration with the federal government's approach to per- and polyfluoroalkyl substances, which are toxic, unregulated chemicals being found in an increasing number of water supplies across the country. One of the worst known contamination hot spots is in Bucks and Montgomery counties, where the drinking water of more than 70,000 residents was found to be contaminated after the chemicals were used in firefighting foams at area military bases.

The Department of Defense is investigating more than 400 bases across the country where the foams may have been used, and to date has identified dozens of drinking water systems contaminated above a 70 parts per trillion (ppt) health advisory level developed by the Environmental Protection Agency. The EPA also recently announced a [PFAS Action Plan](#), using an acronym for the chemicals, in which officials said they "intend" to set a formal drinking water standard for two prominent PFAS chemicals and consider other measures, including listing them as hazardous substances under the federal Superfund law.

The U.S. Centers for Disease Control and Prevention also is engaged on the topic, after federal lawmakers appropriated millions of dollars for a nationwide health study to examine communities impacted by PFAS chemicals and look for associated health impacts.

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Industry Emphasizes Uncertain Science to Fight Strict PFAS Limits

Entire Article: <https://insideepa.com/daily-news/industry-emphasizes-uncertain-science-fight-strict-pfas-limits>

Industry advocates are welcoming EPA's recently released action plan to address per- and polyfluoroalkyl substances (PFAS), saying it provides an opportunity to consider uncertain science in any future drinking water or other regulations, which some say could result in weaker limits than what the agency has previously offered.

"The Action Plan lays out many actions to improve our scientific understanding of PFAS and to assist states and communities responding to PFAS challenges," the Responsible Science Policy Coalition (RSPC), a group that includes both manufacturers and consumers of the chemicals, said in a statement.

Still, other industry officials are warning that regardless of the stringency of any limit EPA sets, should the agency move forward with plans to list any PFAS as hazardous substances under the Superfund law, it will likely drive significant new cost recovery litigation.

“Statutory claims involving PFAS are likely to proliferate in both state and federal courts. This is especially so if PFAS are designated as hazardous substances under state cleanup laws or the federal Superfund statute(s),” Marten Law policy adviser Nathan Frey and senior associate Jennifer Hammitt write in [a recent review](#) of EPA's plan.

EPA's long-awaited PFAS action plan, which Acting EPA Administrator Andrew Wheeler unveiled Feb. 14, is a multi-media effort to address the widespread concern over PFAS contamination through a host of short- and long-term efforts. While it includes a series of steps to better monitor the extent of contamination and assess risks, the plan takes just initial steps on water and waste regulatory measures.

For example, the plan includes a goal of proposing a Safe Drinking Water Act (SDWA) regulatory determination on perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) -- the two most widespread PFAS -- by the end of 2019, which could eventually lead to an enforceable maximum contaminant level (MCL) for the chemicals.

But while top EPA officials say they intend to set MCLs for the two substances, [state officials](#) and other critics charge the promise is not firm enough and that the chemicals are dangerous enough that EPA should act more quickly.

Wheeler also announced that under the plan EPA has already begun the regulatory process for listing PFOA and PFOS as hazardous substances under the Superfund law -- an action that will aid states and communities in cleaning up contamination and recovering costs from responsible parties.

The plan embraces some of the ideas pushed by the chemical industry last fall when it gave input to EPA on developing the action plan. For instance, EPA under the plan commits to working across the agency and the federal government to develop a risk communication toolbox on PFAS to communicate with communities, and will convene a federal interagency PFAS group to ensure collaborative actions and “consistent messaging on PFAS toxicity that is informed by the best available science.”

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Ahead of Wheeler Vote, Democratic Senators Praise EPA Water Loan Program

Entire Article: [https://insideepa.com/daily-news/ahead-wheeler-vote-democratic-](https://insideepa.com/daily-news/ahead-wheeler-vote-democratic-senators-praise-epa-water-loan-program)

[senators-praise-epa-water-loan-program](#)

BALTIMORE -- As the Senate prepares to vote on Andrew Wheeler's nomination to be EPA administrator, Maryland's Democratic senators are praising Wheeler and the agency's work on providing water infrastructure loans, suggesting that he will enjoy some level of cooperation from Democrats even if they vote against him.

At a Feb. 25 event here to award a \$202 million loan to the city through EPA's Water Infrastructure Finance and Innovation Act (WIFIA) program, Cardin thanked Wheeler -- currently the agency's acting administrator -- for “helping clean water around the nation using the WIFIA funds.”

Wheeler called Cardin “a true partner” across many environmental issues but “especially when it comes to protecting the Chesapeake Bay.”

And Sen. Chris Van Hollen (D-MD), after thanking Cardin for his work to reauthorize WIFIA last year, said, “To our EPA administrator, thank you for taking that authority and running with it and putting Baltimore city, right at the top of the priority list” for WIFIA loans.

While few Democrats are likely to support Wheeler when his nomination comes to the floor as soon as this week, the two Democratic senators' comments suggest that once confirmed Wheeler is unlikely to have the same kind of rocky relationship with lawmakers as his predecessor, former Administrator Scott Pruitt.

Although Democrats are not likely to vote for Wheeler, he told reporters after the Baltimore event that he expected to be confirmed. It looks like things are “going well,” he said. Noting that Senate Majority Leader Mitch McConnell (R-KY) had filed for cloture on his nomination, Wheeler said, “They don't file for cloture unless they have the votes.”

Before the Baltimore event, Democrats had signaled that they will continue to seek concessions from Wheeler even as they vote against him.

Both Cardin and Van Hollen sit on the Senate Environment and Public Works Committee, which approved Wheeler's nomination on a party-line vote earlier this month. After the vote, both Maryland senators said they hoped to see commitments or concessions from EPA on several environmental issues.

Cardin said that while Wheeler has said the agency is not intending to weaken mercury and air toxics standards (MATS) for power plants, “it would be good if we saw action on it.”

And Van Hollen said that when the nomination reaches the Senate floor, “hopefully some of our Republican colleagues who share some of our concerns will express them to Wheeler, and maybe we can get some concessions.”

Sen. Thomas Carper (D-DE), the top Democrat on the panel, has listed several policy concerns in addition to MATS, including fuel efficiency standards, hydrofluorocarbons, perfluorinated compounds and a paint stripper chemical. However, Carper has since said EPA's release of its per- and polyfluoroalkyl substances (PFAS) action plan that commits to pursuing a Safe Drinking Water Act (SDWA) standard for two PFAS has assuaged his concerns on that front.



WATER ONLINE

PFAS Contamination Issue Taken Up By Local Regulators

The presence of per- and polyfluoroalkyl substances (PFAS) in drinking water is creating concern among utilities, regulators, and consumers around the country. With little clear direction from federal lawmakers, some local agencies are stepping up to tackle the issue themselves.

In Pennsylvania, for instance, PFAS has been found at levels in drinking water that may endanger human health. This has prompted the local environmental agency to set stricter standards.

“The Pennsylvania Department of Environmental Protection will work to set up its own drinking water standards for toxic chemicals popping up in drinking water across the state,” according to The

Intelligencer. “The announcement comes on the heels of a news conference held by the Environmental Protection Agency in Philadelphia on Thursday, in which the agency kicked a decision on whether to regulate perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), until the end of the year. While acting EPA administrator Andrew Wheeler said he had ‘every intention’ of developing a standard for the chemicals, the agency stopped short of promising it would do so.”

The U.S. EPA does have health advisories for PFOA and PFOS, established at 70 parts per trillion. However, many afflicted locations around the country don’t feel that this standard goes far enough.

“The New Jersey Drinking Water Quality Institute was asked by the state Department of Environmental Protection to evaluate a family of chemicals known as PFAS — starting with PFNA — when it was brought into the spotlight nearly 10 years ago after it was detected in drinking water and fish in Gloucester County,” per NJTV. “New Jersey became the first state to set a maximum contamination level for PFNA last year at 13 parts per trillion.”

Local agencies in Michigan and New York have taken similar measures, as has Vermont’s Agency of Natural Resources.

“The state Agency of Natural Resources, or ANR, proposed a maximum contaminant level of a combined 20 parts per trillion for five toxic per- and polyfluoroalkyl substances, known as PFAS chemicals — PFOA, PFOS, PFHxS, PFHpA and PFNA,” Valley News reported. “Managers of public drinking water supplies would be required to test water and treat it if levels for those chemicals are above the limit.”

The problem also extends West, as New Mexico considers local action on PFAS without enforcement from the federal level.

Though it does appear the EPA is getting ready to issue some stricter regulations on PFAS, many local regulators clearly feel that they need to take matters into their own hands in the meantime.

To read more about rules around PFAS contamination, visit Water Online’s [Drinking Water Regulations And Legislation Solutions Center](#).

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